PW SKILLS

Missing Number in an Array

arr = [1, 2, 3, 5] → Top 5 numbers

Output = 4

n = 4

Sum of 5 natural numbers = $\frac{n * (n+1)}{2}$

$\frac{(n+1)(n+2)}{2}$

15 = $\frac{5 * 6}{2}$ 3

Sum of arr elements = 1 + 2 + 3 + 5

= 11

missing number = 15 − 11

= 4

Analysis

Time complexity - O(n)

Space complexity - O(1)

Research → ??

N → Large → Overflow

Lesson Plan